

REMARKS

Support for the limitation respecting molding temperature recited in Claim 28 is found in the application in page 2, line 23.

As presently amended the invention is directed to a method of using a specifically recited molding composition, the method entailing manufacturing an article by injection molding at temperatures higher than 300°C. The molding composition contains (A) a polymer based on vinylcyclohexane and (B) a stabilizer system that contains lactone, sterically hindered phenol and a phosphite compound. The invention resides in the findings that molding the recited composition at relatively high temperatures does not bring about appreciable deterioration of the resin.

Claims 1-4, 6, 7, 9, 12 and 18-27 stand rejected under 35 U.S.C. 103(a) as unpatentable over PCT WO/9941307 (Blaha) .

As presently amended, the inventive method of use is believed patentable over Blaha.

Blaha disclosed a composition containing presently relevant components. The art (including Blaha in page 1 line 10) has long recognized that polycyclohexylethylene (PCHE) is susceptible to thermal degradation, a characteristic that restricts its applicability. In fact the exemplified compositions are said (in page 13 - line 1) to have been processed at 260°C. Also instructive in this connection are the comparative results – Blaha, Table II , page 14 – showing the extent of degradation as function of number of passes through the extruder at 260°C. Accordingly it is clear that Blaha's composition – exemplified as Sample 1- that contains a hindered phenol and a lactone performs better, that is shows less degradation at the test temperature, than a corresponding composition that in addition contain a phosphite. It is clear from the results that if anything, Blaha teaches away from including a phosphite in the referenced composition.

In view of Blaha's disclosure it is indeed surprising and unexpected that the presently claimed composition offers enhanced thermal stability. Attention is respectfully directed to the results shown in Table 2 – page 14 of the present application where example 3, that demonstrates the inventive process points to the greater thermal stability of the inventive composition extruded at a maximum temperature of 335°C.

Blaha cannot reasonably be said to have disclosed or suggested the presently claimed process.


Reconsideration and retraction of the rejection alleging obviousness are requested.

The claims have also been rejected as being unpatentable over Stevenson et al (U.S. Patent 6224,791) in view of Patent Abstract No. 1294753 (presumed to be JP 1294753).

Stevenson disclosed a blend of phosphate and lactone said to act as a stabilizer for polymers. Nothing in the document points to the utility of the blend at process temperature higher than 280°C. JP 1294753 is not seen to augment Stevenson in any presently relevant manner.

Believing the above represent a complete response to the Office Action and that the application is in condition for allowance, applicants request the earliest issuance of an indication to this effect.

Respectfully submitted,

By  _____
Aron Preis
Attorney for Applicants
Reg. No. 29,426

Bayer Polymers LLC
100 Bayer Road
Pittsburgh, Pennsylvania 15205-9741
(412) 777-3814
FACSIMILE PHONE NUMBER:
(412) 777-3902
s:\shared\kgb\ap2897am